ADA Facts

WOMEN & ALCOHOL

Women have a higher risk of developing problems from alcohol consumption. Alcohol has a different and seemingly greater negative impact on women than men. Significantly, research indicates that mild-to-moderate alcohol use affects female reproductive function. Specifically, alcohol has harmful effects on puberty, disrupts menstrual cycling and reproduction, and alters hormonal levels in postmenopausal women.

▼ Girls, Alcohol and Sex

Adolescence is a time of dramatic changes in hormone levels and patterns. In girls, pubertal maturation is associated with emotional difficulties, depression, and problems with self-image as well as an increase in risk-taking behaviors. Rapid hormonal changes occurring during puberty make females especially vulnerable to the effects of alcohol exposure during this time. Estrogen levels can be depressed among adolescent girls ages 12-18 for as long as 2 weeks after drinking moderately. Alcohol can alter the reproduction awakening and maturation that marks puberty. Also, estrogen's role in bone maturation raises the question of whether alcohol use during adolescence has long-term effects on the bone health. Active bone growth occurs during puberty, and alcohol's disruption of bone development may cause lifelong osteoporosis. Alcohol consumption during adolescence is known to affect growth and body composition.

In addition to alcohol's effects on physical development, alcohol (and other drugs) is associated with sexual activity. According to the 2003 Youth Risk Behavior Surveillance System (YRBSS), 21 percent of sexual active girls in grades 9-12 consumed alcohol (or used drugs) before their last intercourse. In Missouri, 22.3 percent of sexual active girls had consumed alcohol (or used drugs) before their last intercourse.

▼ Women, Alcohol, Sex and Domestic Violence

Women who abuse alcohol are at a higher risk for HIV/AIDS, injury, and sexually transmitted diseases (STDs). Alcohol markedly disrupts normal menstrual cycling in females. Alcoholic women are known to have a variety of menstrual and reproductive disorders, from irregular menstrual cycles to complete cessation of menses, absence of ovulation, and infertility. Alcohol abuse has also been associated with early menopause. These conditions can lead to women having more gynecological surgeries and sexual dysfunction. Also women who drink heavily or are alcoholic are more likely to become victims of alcohol-related aggression, such as date rape or domestic violence.

▼ Alcohol and the Older Adult Woman

Alcohol use affects the health of postmenopausal women in two ways – directly, through its impact on organ systems such as the liver, brain, and gastrointestinal tract, and indirectly, by altering the blood levels of sex steroids that affect the risk of disease.

Heavy alcohol use is a recognized risk factor in osteoporosis. Alcohol abuse contributes to bone weakness, increasing the risk of fracture. Alcoholics have reduced bone mass, which is evident in the loss of bone tissue in the spine and iliac crest. Alcohol consumption leads to accelerated bone loss. Heavy drinking can also damage the heart and increase the risk of coronary heart disease in older women.

Alzheimer's disease is the most common form of dementia among older adults. Women appear to be at greater risk than men for Alzheimer's. Heavy alcohol consumption also may increase the risk for Alzheimer's in women in particular, as they appear to be more vulnerable than men to alcohol-induced brain damage. Heavy alcohol consumption is known to result in memory deficits.

▼ Alcohol and Pregnancy

Maternal alcohol use during pregnancy contributes to a wide range of effects on exposed offspring, including hyperactivity and attention problems, learning and memory deficits, and problems with social and emotional development. The most serious consequence of maternal drinking during pregnancy is fetal alcohol syndrome (FAS). Children with FAS have a distinctive set of facial anomalies, growth retardation, and significant learning and/or behavioral problems. Even children prenatally exposed to lower levels of alcohol may exhibit learning and behavioral problems. FAS is one of the leading preventable causes of death in the country.

Alcohol abuse during pregnancy is the leading preventable cause of mental retardation in offspring in the United States. About half of the pregnancies in the country are unplanned, explains Dr. Laura Riley, an obstetrician at Massachusetts General Hospital, therefore many women are caught off guard. But for those women who know well in advance about their condition, the best advice is simply abstinence from alcohol, Riley says. The most severe consequences of maternal alcohol abuse are fetal alcohol syndrome (FAS) and alcohol-related neurodevelopmental disorder (ARND) both of which are associated with substantial cognitive and behavioral deficits. ARND refers to children who had prenatal exposure to alcohol but lack the characteristic facial defects and growth deficiency of FAS but still have alcohol-induced mental impairments that are just as serious, if not more so than in children with FAS. Any kind of alcohol, whether it is beer, wine or hard liquor, can be harmful to the fetus.

▼ Additional Information

For additional information about Women and Alcohol, visit the websites of the National Institute on Alcohol Abuse and Alcoholism, NIAAA (www.niaaa.nih.gov), the National Clearinghouse for Alcohol and Drug Information, NCADI (www.health.org), and the Missouri Prevention site (www.missouriprevention.org).

ADA
DIVISION OF ALCOHOL AND DRUG ABUSE

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Sources: National Institute on Alcohol Abuse and Alcoholism, Substance Abuse and Mental Health Services Administration, and National Institute on Drug Abuse. Emanuel, M. A.; Wezeman, F; and Emanuele N.V. Alcohol's Effects on Female Reproductive Function. Alcohol Reaseach & Health, 26 (4), 2002; Spear, Linda P. Alcohol's Effects on Adolescents. Alcohol Research & Health, 26(4), 2002; Grunbaum J.A; et al. Youth Risk Behavior Surveillance – Untied States, 2003. In: Surveillance Summaries, May 21, 2004. MMWR 2004; 53(ss-2):pp. 1-96.